

The opinion in support of the decision being entered today
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM E. RYAN JR,
ROBERT K. GOTTLIEB, and JOSEPH D. MALLOZZI

Appeal 2007-1799
Application 10/036,991
Technology Center 1700

Decided: July 10, 2007

Before DONALD E. ADAMS, ERIC GRIMES,
and LORA M. GREEN, *Administrative Patent Judges*.

ADAMS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal under 35 U.S.C. § 134 involves claims 1-15, the only
claims pending in this application. We have jurisdiction under 35 U.S.C.
§ 6(b).

INTRODUCTION

The claims are directed to a system of sanitizing mailpieces (claims 1-12) or sorting and sanitizing mailpieces (claims 13-15). Claims 1, 4, and 13 illustrative:

1. A system for sanitizing mailpieces comprising:
 - a component for singulating and feeding a mailpiece along a feed path of the system;
 - a sanitizer module positioned downstream of the component for singulating and feeding the mailpiece, the sanitizer module for sanitizing the mailpiece;
 - a filtered transition area downstream of the sanitizer module;
 - and
 - an output bin module for receiving a mailpiece after the mailpiece has been sanitized.
4. The system as claimed in claim 1 wherein the sanitizer module comprises:
 - a first set of guide walls, each guide wall in the first set of guide walls positioned parallel to the feed path and facing the other guide wall forming an alley along the feed path;
 - a second set of guide walls positioned down stream of the first set of guide walls along the feed path and forming a gap along the feed path between the first set of guide walls and the second set of guide walls, each guide wall in the second set of guide walls positioned parallel to the feed path and facing the other guide wall forming an alley along the feed path; and
 - a sanitization apparatus positioned along the feed path in the area of the gap along the feed path between the first set of guide walls and the second set of guide walls, wherein the sanitizer module is adjacent to the filtered transition area.
13. A system for sorting and sanitizing incoming mailpieces comprising:
 - a component for singulating and feeding a mailpiece along a feed path of the system;

a sanitizer module positioned downstream of the component for singulating and feeding the mailpiece, the sanitizer for decontaminating the mailpiece, the sanitizer module comprises:

a first set of guide walls, each guide wall in the first set of guide walls positioned parallel to the feed path and facing the other guide wall forming an alley along the feed path;

a second set of guide walls positioned down stream of the first set of guide walls along the feed path and forming a gap along the feed path between the first set of guide walls and the second set of guide walls, each guide wall in the second set of guide walls positioned parallel to the feed path and facing the other guide wall forming an alley along the feed path;

a sanitization apparatus positioned along the feed path in the area of the gap along the feed path between the first set of guide walls and the second set of guide walls, the sanitization apparatus comprises at least one apparatus for the group consisting of: an irradiation apparatus, an ultraviolet light source, a microwave emitter, an ozone generator and a chemical mister;

an output bin module for receiving a mailpiece after the mailpiece has been sanitized

wherein at least a portion of the feed path comprises a transport belt which travels along an edge of the first set guide walls and an edge of the second set of guide walls; and

whereby the mailpiece is sanitized as it passes by the gap along the feed path between the first set of guide walls and the second set of guide walls, and wherein

the sanitizer module is adjacent to a filtered transition area.

The Examiner relies on the following prior art references to show unpatentability:

Stirling
Call

US 6,191,424 B1
US 2002/0124664 A1

Feb. 20, 2001
Sep. 12, 2002¹

¹ Provisional Application No. 60/337,674 ('674), filed November 13, 2001.

The rejections as presented by the Examiner are as follows:

1. Claims 1-3 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Call.
2. Claims 4-15 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Call and Stirling.

We affirm.

DISCUSSION

Anticipation:

Claims 1-3 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Call. Appellants do not separately argue the claims. Accordingly, we limit our discussion to representative independent claim 1. Claims 2 and 3 will stand or fall together with claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

Claim 1 is drawn to a system for sanitizing mailpieces. The system comprises four elements:

1. A component for singulating and feeding a mailpiece along a feed path of the system;
2. A sanitizer module for sanitizing the mailpiece positioned downstream of the component for singulating and feeding the mailpiece;
3. A filtered transition area downstream of the sanitizer module; and
4. An output bin module for receiving a mailpiece after the mailpiece has been sanitized.

The Examiner finds that Call teaches a system for sorting and sanitizing mail pieces wherein the mail is singulated and fed via a conveyor through a detection station and then through a sanitation section (Answer 3).

In addition, the Examiner finds that Call teaches a system wherein a filtered transition area is present on either side of the sanitation section (*id.*).

Call teaches that the incoming mail handling equipment and outgoing mail handling equipment associated with screened mail are generally conventional and well known in the art (Call 10: ¶ 0127; '674 11:16-18 and 14:1-3). According to Call,

[m]ail to be screened for contaminants enters containment chamber . . . via a feeder . . . (generally a conveyor belt similar to those employed in conventional mail processing rooms and baggage handling systems in airports). Feeder . . . moves incoming mail . . . through a first seal . . . into containment chamber The mail passes through the width of containment chamber . . . and out through a second seal Screened mail . . . that has passed through the system is then available for further processing. Feeder . . . and other conventional equipment necessary to sort and manipulate mail to enable items of mail to be individually fed into containment chamber . . . are well known in the art; such equipment is hereinafter referred to as "the incoming mail handler."

(Call 7-8: ¶ 0109; *see also* '674 11:5-19.) Call teaches that "[t]he incoming mail handler separates the mail into individual envelopes or packages, which enter into [the] containment chamber . . . in single file" (Call 8: ¶ 0111; '674 11:19). Accordingly, Call teaches a component for singulating and feeding a mailpiece along a feed path of the system – e.g., an incoming mail handler. Therefore, we are not persuaded by Appellants' assertion that Call does not teach a component for singulating mail pieces (Br. 13).

As discussed above, Call teaches that the incoming mail handler feeds individual mailpieces into a containment chamber. Call teaches a decontamination subsystem in the containment chamber that applies decontamination fluid as a spray to a contaminated parcel and the

containment chamber (Call 4: ¶ 0035; '674 13:22-24 and 15:13-15).

Accordingly, Call teaches a sanitizer module for sanitizing the mailpiece positioned down stream of the incoming mail handler.

Call teaches that containment chamber includes HEPA filters to filter air released into the environment from inside the containment chamber (Call 8: ¶ 0110; '674 15:3-7). As Call explains, once mail has passed through the mail sampling system (e.g., containment chamber) it is further processed by conventional mail handler machines (e.g., an outgoing mail handler) (Call 9: ¶ 0121; '674 15:20-21). However, prior to reaching the outgoing mail handler, the mail must pass through a transition zone (e.g., the outgoing side of the containment chamber) which is not only filtered, but is also operated under negative pressure to avoid contamination of the environment outside of the chamber (Call 2: ¶ 0020 and 9: ¶ 0116; '674 13:11-19). While we recognize that claim 1 requires a filtered transition area downstream of the sanitizer module, we note that both the claim and Appellants' Specification fail to specifically define the intended scope encompassed by an area downstream of the sanitizer module. At best Appellants' Specification states

[a]ppropriate filtration and sealing can be provided in transition area 43 of the feed path F that is a passage between the clean room 42 and sanitization area 42 [sic, 40]. A containment module (not shown), for example, can be placed around that area with filtration devices and an opening along the feed path F to accommodate the largest mailpiece which can be sorted by the system.

(Specification 12: ¶ 038; *see also* 16: ¶ 048 and 19: ¶ 056).

As discussed above, Call teaches a sanitizer module as a subsystem of the containment chamber. The containment chamber is filtered and operated under negative pressure. Accordingly, we find that the transition from the

containment chamber to the outgoing mail handler satisfies the requirement in Appellants' claim for a filtered transition area downstream of the sanitizer module. Accordingly, we are not persuaded by Appellants' assertion that Call fails to teach a filtered transition area downstream of the sanitizer module (Br. 13).

According to Appellants' Specification the present invention is directed to an automated mailpiece sorting apparatus that comprises a sorting apparatus, sanitizer and compartments or bins for receiving sorted mailpieces (Specification 4: ¶ 8). Call teaches that "[o]nce passed through mail sampling system . . . screened mail . . . can be processed by conventional mail handler machines, such as conventional systems that automatically read address information from each piece of mail, and route the mail to the appropriate location" (Call 9: ¶ 0121; '674 14: 1-3). In our opinion Call's process inherently results in a sanitized mailpiece being received by an output bin module. Accordingly, we are not persuaded by Appellants' assertion that Call does not teach an output bin module for receiving a mailpiece after the mailpiece has been sanitized (Br. 13).

We recognize Appellants' assertion that Call is only available as prior art to the extent it is supported by the underlying provisional application [('674)]. Appellants question whether the teachings in Call, as relied upon by the Examiner, are supported by the '674 provisional application. We are not persuaded by Appellants' assertion. In the foregoing discussion, we find support for each limitation of Appellants' claimed invention not only in Call, but also in the underlying '674 provisional application.

On reflection, having found no error in the Examiner's prima facie case of anticipation, we affirm the rejection of claim 1 under 35 U.S.C.

§ 102(e) as being anticipated by Call. Claims 2 and 3 fall together with claim 1.

Obviousness:

Claims 4-15 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Call and Stirling. Appellants identify two claim groupings (1) claims 4-12 and (2) claims 13-15. Accordingly, we limit our discussion to representative claims 4 and 13. Claims 5-12 will stand or fall with claim 4. Claims 14 and 15 will stand or fall with claim 13. 37 C.F.R. § 41.37(c)(1)(vii).

Claim 4:

Claim 4 depends from and further limits the sanitizer module element in the system of claim 1. Specifically, claim 4 requires that the sanitizer module comprises:

1. A first set of guide walls, wherein each guide wall is positioned parallel to the feed path and the guide walls face each other to form an alley along the feed path;

2. A second set of guide walls that are positioned along the feed path but downstream of the first set of guide walls to form a gap along the feed path between the first set of guide walls and the second set of guide walls. Claim 4 requires that each guide wall in the second set of guide walls is positioned parallel to the feed path and the guide walls face each other to form an alley along the feed path; and

3. A sanitization apparatus positioned along the feed path in the area of the gap created by the first set and second set of guide walls. In addition,

claim 4 requires that the sanitizer module is adjacent to the filtered transition area.

The Examiner relies on Call as discussed above (Answer 4). As we understand the basis of the rejection, the Examiner finds that Call does not teach the structure of the sanitizer module set forth in Appellants' claim 4. The Examiner relies on Stirling to make up for this deficiency. According to the Examiner, Stirling teaches a configuration for sterilizing articles on a conveyor, wherein a pair of channels is separated by a cavity (Answer 4).

As discussed above, Call teaches a system for sanitizing mailpieces which comprises, *inter alia*, a sanitizer module. Call does not, however, teach the structure of the sanitizer module. Stirling teaches "a compact irradiation apparatus integral to a production line that can sterilize product received from a manufacturing process on a continuous basis" (Stirling, col. 2, ll. 54-58). Stirling's irradiation apparatus comprises a primary shield that includes a channel, accommodating a conveyor means, which extends through the shield and intersects with a central cavity (Stirling, col. 3, ll. 44-47). Stirling teaches the placement of an irradiation device within the cavity (Stirling, col. 4, ll. 53-60). Stated differently, Stirling teaches a first set of guide walls positioned parallel to the feed path and facing each other to form an alley along the feed path leading into a central cavity. Stirling teaches a second set of guide walls positioned parallel to the feed path and facing each other to form an alley along the feed path. Stirling's second set of guide walls are down stream of the first set of guide walls and lead away from the central cavity. Accordingly, the first and second sets of guide walls form a gap, or central cavity, along the feed path into which a sanitization, e.g., irradiation, apparatus is positioned.

As the Examiner explains, “[i]t would have been well within the purview of one of ordinary skill in the art to utilize a structure such as that taught in Stirling et al., for the sanitation station in Call et al., because it would provide for effective means to retrofit existing mail handling conveyances to provide effective decontamination without requiring user interaction” (Answer 4). We agree.

“When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 82 USPQ2d 1385, 1397 (2007). For the reasons discussed above, integrating Stirling’s sanitizer module into Call’s containment chamber will result in the sanitizer module being positioned adjacent to the filtered transition area.

On reflection, we find no error in the Examiner’s prima facie case of obviousness. For their part, Appellants assert that the combination of Call and Stirling fails to teach the structural limitations of the sanitizer module set forth in claim 4 (Br. 15). For the foregoing reasons, we are not persuaded by Appellants’ assertion. Accordingly, we affirm the rejection of claim 4 under 35 U.S.C § 103(a) as unpatentable over the combination of Call and Stirling. Claims 5-12 fall together with claim 4.

Claim 13:

Claim 13 is drawn to a system for sorting and sanitizing incoming mailpieces. The system of claim 13 comprises 4 elements:

1. A component for singulating and feeding a mailpiece along a feed path of the system;
2. A sanitizer module, downstream of the component for singulating and feeding the mailpiece, that comprises
 - (a) a first set of guide walls, wherein each guide wall is positioned parallel to the feed path and the guide walls face each other to form an alley along the feed path;
 - (b) a second set of guide walls that is positioned along the feed path but downstream of the first set of guide walls to form a gap along the feed path between the first set of guide walls and the second set of guide walls. Claim 13 requires that each guide wall in the second set of guide walls is positioned parallel to the feed path and the guide walls face each other to form an alley along the feed path; and
 - (c) a sanitization apparatus that comprises at least one apparatus selected from the group consisting of an irradiation apparatus, an ultraviolet light source, a microwave emitter, an ozone generator and a chemical mister. Claim 13 requires that the sanitization apparatus is positioned along the feed path in the area of the gap along the feed path between the first set of guide walls and the second set of guide walls.
3. A filtered transition area adjacent to the sanitizer module; and
4. An output bin module for receiving a mailpiece after the mailpiece has been sanitized.

In addition, claim 13 requires that at least a portion of the feed path comprises a transport belt which travels along an edge of the first set of guide walls and an edge of the second set of guide walls; and that the

mailpiece is sanitized as it passes by the gap along the feed path between the first set of guide walls and the second set of guide walls.

The combination of Call and Stirling is discussed above. According to Appellants, the combination of Call and Stirling fails to teach a transport belt which travels along an edge of the first set of guide walls and an edge of the second set of guide walls (Br. 14-15). We disagree. As discussed above, Stirling teaches an irradiation apparatus comprising a primary shield that includes a channel (e.g., first and second guide walls) that accommodates a conveyor means (Stirling, col. 3, ll. 44-47). Stated differently, the conveyor means travels along an edge of the first and second set of guide walls. While Appellants' Specification discloses an embodiment wherein the guide walls are replaced with vertically oriented transport belts (Specification 13: ¶ 041), claim 13 does not require the transport belts to be vertically oriented. To the contrary, claim 13 reads on a horizontal transport belt positioned in the channel of the primary shield, e.g., between the first and second set of guide walls, that travels along an edge of the first and second set of guide walls. Accordingly, Appellants fail to distinguish Stirling's conveyor means from their transport belt.

For the foregoing reasons, we affirm the rejection of claim 13 under 35 U.S.C. § 103(a) as unpatentable over the combination of Call and Stirling. Claims 14 and 15 fall together with claim 13.

CONCLUSION

In summary, we affirm the rejection under 35 U.S.C. § 102(e) and § 103.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

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